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? s particulate??  
S1 114525 PARTICULATE??

? s trehalose  
S2 8299 TREHALOSE

? s s1 and s2  
114525 S1  
8299 S2  
S3 43 S1 AND S2

? s s3 and py<=1994  
Processing

43 S3  
25468457 PY<=1994  
S4 24 S3 AND PY<=1994

? rd

>>>Duplicate detection is not supported for File 340.

>>>Records from unsupported files will be retained in the RD set.

...completed examining records  
S5 16 RD (unique items)

? t s5/3,k,ab/1-16

5/3,K,AB/1 (Item 1 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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08110723 94262324 PMID: 8203161

Analysis of PFK3--a gene involved in **particulate**  
phosphofructokinase synthesis reveals additional functions of TPS2 in  
Saccharomyces cerevisiae.

Sur I P; Lobo Z; Maitra P K

Molecular Biology Unit, Tata Institute of Fundamental Research, Colaba,  
Bombay, India.

Yeast (Chichester, England) (ENGLAND) Feb 1994, 10 (2)

p199-209, ISSN 0749-503X Journal Code: 8607637

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

The pfk3 mutation of Saccharomyces cerevisiae causes glucose-negativity in a pfk1 genetic background, the mutant is temperature-sensitive for growth and homozygous diploids do not sporulate. It fails to accumulate **trehalose**, and has an altered glycogen accumulation profile under glucose-starvation conditions. pfk3-6, one of the alleles of pfk3, has an altered morphology, forming long chain-like structures at 36 degrees C. The PFK3 gene was cloned by complementation of the mutant phenotypes. Integrative transformation demonstrated that the complementing fragment encoded the authentic PFK3 gene. The disruption of the gene does not affect viability. Like the EMS-induced pfk3 mutant, the disruptants are temperature-sensitive and in a pfk1 genetic background are also glucose-negative. The PFK3 transcript is induced by heat-shock. Partial DNA sequence shows that PFK3 is identical to TPS2 (De Virgilio et al., 1993). We demonstrate that, apart from being a structural determinant of **trehalose** 6-phosphate phosphatase, PFK3 (TPS2) is required for PFKII synthesis and normal regulation of S. cerevisiae response to nutrient and thermal stresses.

Analysis of PFK3--a gene involved in **particulate**  
phosphofructokinase synthesis reveals additional functions of TPS2 in  
Saccharomyces cerevisiae.

Feb 1994,

... is temperature-sensitive for growth and homozygous diploids do not sporulate. It fails to accumulate **trehalose**, and has an altered glycogen accumulation profile under glucose-starvation conditions. pfk3-6,

one of...

... De Virgilio et al., 1993). We demonstrate that, apart from being a structural determinant of **trehalose** 6-phosphate phosphatase, PFK3 (TPS2) is required for PFKII synthesis and normal regulation of S...

...; cerevisiae--cytology--CY; Saccharomyces cerevisiae--enzymology--EN; Saccharomyces cerevisiae--growth and development--GD; Sequence Analysis; **Trehalose**--analysis--AN

Enzyme No.: EC 2.4.1.- (Glucosyltransferases); EC 2.4.1.15 (alpha,alpha-**trehalose** phosphate synthase(UDP-forming)); EC 2.7.1.11 (Phosphofructokinase-1); EC 3.1.3 (Phosphoric Monoester Hydrolases); EC 3.1.3.12 (**trehalose**-phosphatase)

Chemical Name: Heat-Shock Proteins; RNA, Messenger; Glycogen; **Trehalose**; Glucosyltransferases; alpha,alpha-**trehalose** phosphate synthase(UDP-forming); Phosphofructokinase-1; Phosphoric Monoester Hydrolases; **trehalose**-phosphatase

5/3,K,AB/2 (Item 2 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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08079866 94212557 PMID: 8160361

Evaluation of several adjuvants as alternatives to the use of Freund's adjuvant in rabbits.

Leenaars P P; Hendriksen C F; Angulo A F; Koedam M A; Claassen E  
National Institute of Public Health and Environmental Protection (RIVM), Bilthoven, Netherlands.

Veterinary immunology and immunopathology (NETHERLANDS) Mar 1994,

40 (3) p225-41, ISSN 0165-2427 Journal Code: 8002006

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

In three experiments we evaluated several types of adjuvants as an alternative to Freund's adjuvant (FA). In the first experiment three adjuvant preparations (a water-in-oil emulsion (Specol), a combination preparation of monophosphoryl lipid A + **trehalose** dimycolate + cell wall skeleton and a non-ionic block polymer surfactant (TiterMax)) were evaluated. The adjuvants were combined with three different types of weak immunogenic antigens (synthetic peptide, glycolipid and **particulate** antigen) and administered following the intramuscular and subcutaneous route. The evaluation was based on clinical, pathological and immunological parameters. The animals did not appear to be severely or chronically impaired by the experiment. After injection of the RIBI adjuvant, side effects of the same severity as with FA were induced, while low antibody titers were produced. TiterMax caused few side effects, while antibody responses were very low. In comparing Specol and FA, Specol had far fewer adverse effects than FA. However, Specol had immunostimulating properties of the same level as FA. In the second experiment, the effect of injected volume of FA on side effects and antibody titer was studied. Immunization of rabbits with a total of 0.5 ml FA at different sites does not seem to increase the immune response when compared with the immune response seen after injection of 0.5 ml FA at one site. However side effects were seen in all the animals. In the third experiment, the side effects following intradermal (i.d.) injection of the adjuvants were studied. After i.d. injection of FA or RIBI, undesirable effects were found. No side effects occurred after i.d. injection of Specol or TiterMax. From the studies it is concluded that Specol is an alternative to FA for hyperactivation of the immune response in rabbits.

Mar 1994,

...adjuvant preparations (a water-in-oil emulsion (Specol), a combination preparation of monophosphoryl lipid A + **trehalose** dimycolate + cell

wall skeleton and a non-ionic block polymer surfactant (TiterMax)) were evaluated. The adjuvants were combined with three different types of weak immunogenic antigens (synthetic peptide, glycolipid and **particulate** antigen) and administered following the intramuscular and subcutaneous route. The evaluation was based on clinical...

5/3,K,AB/3 (Item 3 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)  
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07982729 94117838 PMID: 8288880

Liposomes as vaccine carriers. Incorporation of soluble and **particulate** antigens in giant vesicles.

Antimisiaris S G; Jayasekera P; Gregoriadis G  
Centre for Drug Delivery Research, School of Pharmacy, University of London, UK.

Journal of immunological methods (NETHERLANDS) Dec 3 1993, 166

(2) p271-80, ISSN 0022-1759 Journal Code: 1305440

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Giant liposomes (mean diameter 5.5 microns) composed of egg phosphatidylcholine or distearoyl phosphatidylcholine, phosphatidyl glycerol, cholesterol and triolein were prepared by a double emulsion technique. They were then mixed with model **particulate** (killed *Bacillus subtilis*, and killed *Bacille Calmette-Guerin*) and soluble (tetanus toxoid) vaccines and freeze-dried. Rehydration of the powder resulted in the generation of vesicles of similar mean diameter and diameter range, containing up to 27% (mean value) of the materials used for entrapment. Separation of entrapped from non-entrapped material was carried out by sucrose gradient centrifugation (*B. subtilis* and BCG) or centrifugation at 600 x g (toxoid). Light microscopy of liposomes containing *B. subtilis* labelled with fluorescein isothiocyanate revealed the presence of bacteria in individual vesicles which, in separate studies, were also found to entrap latex particles (0.5 and 1.0 micron diameter). Bacteria-containing liposomes could be freeze-dried in the presence of **trehalose** with most (83-87%) of the entrapped material recovered within the vesicles on reconstitution with saline. Liposomes were also shown to retain quantitatively their content of *B. subtilis* and, to a lesser extent, toxoid in the presence of mouse plasma at 37 degrees C and in situ after intramuscular injection into mice, for up to 24 h. Since liposomes are known (Gregoriadis, G. (1990) *Immunol. Today* 11, 89) to act as immunological adjuvants and vaccine carriers, giant vesicles containing microbes (live or attenuated if needed since the conditions of entrapment are mild) and, when appropriate, soluble antigens, could be used as multiple vaccines to ensure simultaneous presentation of antigens to immunocompetent cells.

Liposomes as vaccine carriers. Incorporation of soluble and **particulate** antigens in giant vesicles.

Dec 3 1993,

... and triolein were prepared by a double emulsion technique. They were then mixed with model **particulate** (killed *Bacillus subtilis*, and killed *Bacille Calmette-Guerin*) and soluble (tetanus toxoid) vaccines and freeze...

... 1.0 micron diameter). Bacteria-containing liposomes could be freeze-dried in the presence of **trehalose** with most (83-87%) of the entrapped material recovered within the vesicles on reconstitution with...

5/3,K,AB/4 (Item 4 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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07600555 93129292 PMID: 1482405

Characterization of trehalase in *Rhodotorula rubra*.

Mansure J J; Silva J T; Panek A D

Depart. de Bioquímica, Universidade Federal do Rio de Janeiro, Brasil.

Biochemistry international (AUSTRALIA) Dec 1992, 28 (4)

p693-700, ISSN 0158-5231 Journal Code: 8100311

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Trehalase activity in *Rhodotorula rubra* was found to be bound to the **particulate** fraction of a cell-free extract in contrast with the soluble trehalase activity of *Saccharomyces cerevisiae*. The enzyme was strongly repressed by glucose and derepressed during growth on maltose, **trehalose** and glycerol. This increase in activity was due to a "de novo" synthesis as seen by inhibition with cycloheximide, a mechanism not described for *Saccharomyces cerevisiae*. Catabolite inactivation by addition of glucose was also demonstrated. This **particulate** enzyme does not respond to activation by the cAMP-dependent protein kinase.

Dec 1992,

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... not described for *Saccharomyces cerevisiae*. Catabolite inactivation by addition of glucose was also demonstrated. This **particulate** enzyme does not respond to activation by the cAMP-dependent protein kinase.

...; pharmacology--PD; Heat; Maltose--pharmacology--PD; *Saccharomyces cerevisiae*--enzymology--EN; Trehalase--antagonists and inhibitors--AI; **Trehalose**--pharmacology--PD

Chemical Name: Glucose; Glycerol; Cycloheximide; Maltose; **Trehalose**  
; Trehalase

5/3,K,AB/5 (Item 5 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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07338485 92270570 PMID: 1589406

Lyophilized formulations of recombinant tumor necrosis factor.

Hora M S; Rana R K; Smith F W

Cetus Corporation, Emeryville, California 94608.

Pharmaceutical research (UNITED STATES) Jan 1992, 9 (1) p33-6,

ISSN 0724-8741 Journal Code: 8406521

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Recombinant tumor necrosis factor-alpha (TNF), an investigational biological response modifier, is a protein and is susceptible to **particulate** generation during handling in dilute aqueous solutions. TNF is prone to formation of nonreducible dimers and oligomers during formulation, lyophilization, and storage. The effect of various parameters, such as the pH, protein concentration, and nature of excipients present during lyophilization, on the formation of nonreducible dimers and oligomers was investigated. The results of these studies indicate that these parameters can significantly alter the rate of this reaction.

Inclusion of an amorphous buffer and an appropriate amount of a crystallizing sugar (mannitol) combined with a suitable quantity of an amorphous protectant (dextran, sucrose, **trehalose**, or 2-hydroxypropyl-beta-cyclodextrin) was shown to reduce the formation of these dimeric and oligomeric species during lyophilization. Representative lyophilized formulations of TNF based on selected amorphous excipients were found to be fully bioactive and stable over 9 months.

Jan 1992,

... factor-alpha (TNF), an investigational biological response modifier, is a protein and is susceptible to **particulate** generation during handling in dilute aqueous solutions. TNF is prone to formation of nonreducible dimers...

...a crystallizing sugar (mannitol) combined with a suitable quantity of an amorphous protectant (dextran, sucrose, **trehalose**, or 2-hydroxypropyl-beta-cyclodextrin) was shown to reduce the formation of these dimeric and...

5/3,K,AB/6 (Item 6 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)  
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06416344 90110067 PMID: 2691510

Neutral alpha-glucosidase in granule fractions from guinea pig polymorphonuclear leukocytes: enzymic characterization and comparative studies with monoclonal antibodies.

Imai K; Harada T; Takano Y; Morikawa S; Tanaka A  
Department of Biochemistry, Shimane Medical University.

Journal of biochemistry (JAPAN) Oct 1989, 106 (4) p669-72,  
ISSN 0021-924X Journal Code: 0376600

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Neutral alpha-glucosidase was partially purified from granular fractions isolated from guinea pig polymorphonuclear leukocytes (PMNL). The native enzyme had a high molecular weight, about 417,000, with a subunit of 43,000. The purified enzyme hydrolysed 4-methylumbelliferyl alpha-glucoside and maltose, but not isomaltose, **trehalose**, and glycogen. The enzyme was strongly inhibited by bromoconduritol and castanospermine, but only slightly by turanose. Monoclonal antibodies which can bind specifically to the enzyme were prepared by immunizing mice with the partially purified enzyme. Hybridomas producing the monoclonal antibodies were selected by an enzyme-linked immunosorbent assay. The seven monoclonal antibodies were found to react with the enzyme from PMNL, but not with the glycoprotein-processing alpha-glucosidase isolated from liver microsomes nor with the macrophage enzyme. The results indicated that PMNL contain a **particulate** neutral alpha-glucosidase enzymologically and immunologically distinct from other alpha-glucosidases.

Oct 1989,

... 43,000. The purified enzyme hydrolysed 4-methylumbelliferyl alpha-glucoside and maltose, but not isomaltose, **trehalose**, and glycogen. The enzyme was strongly inhibited by bromoconduritol and castanospermine, but only slightly by...

... from liver microsomes nor with the macrophage enzyme. The results indicated that PMNL contain a **particulate** neutral alpha-glucosidase enzymologically and immunologically distinct from other alpha-glucosidases.

5/3,K,AB/7 (Item 7 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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04779629 85159523 PMID: 3981129

Alterations in trehalase solubility during development in the cellular slime mould Dictyostelium discoideum.

Killick K A

Journal of general microbiology (ENGLAND) Feb 1985, 131 ( Pt 2)  
p273-8, ISSN 0022-1287 Journal Code: 0375371

Contract/Grant No.: AG 04316; AG; NIA; GM 32094; GM; NIGMS

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Previous studies have indicated that during development in the slime mould Dictyostelium discoideum, compartmentation of the isoenzymes of trehalase (alpha, alpha'-**trehalose** 1-D-glucohydrolase, (EC 3.2.1.28)) occurs between the extracellular and intracellular environments. The compartmentation of trehalase between soluble and **particulate** cell fractions was examined in this work. The trehalase present in crude homogenates prepared during the first 12 h of development was completely soluble. Starting at about the pseudoplasmodial stage (i.e. the 14th hour of development), trehalase activity became associated with insoluble cellular material and this increased to a maximal value in homogenates from mature sorocarps, where 50% of the activity was insoluble. Spore cells accounted for only 2 to 3% of the trehalase associated with mature sorocarps, with the remaining 97% being localized in stalk cell material. Although trehalase recovered from spores was completely soluble, more than half of that from the stalk was recovered in the buffer-insoluble pellet fraction.

Feb 1985,

... development in the slime mould Dictyostelium discoideum, compartmentation of the isoenzymes of trehalase (alpha, alpha'-**trehalose** 1-D-glucohydrolase, (EC 3.2.1.28)) occurs between the extracellular and intracellular environments. The compartmentation of trehalase between soluble and **particulate** cell fractions was examined in this work. The trehalase present in crude homogenates prepared during...

5/3,K,AB/8 (Item 8 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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04011223 82283143 PMID: 7052008

Localization of trehalase in vacuoles and of **trehalose** in the cytosol of yeast (Saccharomyces cerevisiae).

Keller F; Schellenberg M; Wiemken A

Archives of microbiology (GERMANY, WEST) Jun 1982, 131 (4)  
p298-301, ISSN 0302-8933 Journal Code: 0410427

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Protoplasts of Saccharomyces cerevisiae synthesized and degraded **trehalose** when they were incubated in a medium containing traces of glucose and acetate. Such protoplasts were gently lysed by the polybase method and a **particulate** and soluble fraction was prepared. **Trehalose** was found in the soluble fraction and the trehalase activity mostly in the **particulate** fraction which also contained the vacuoles besides other cell organelles. Upon purification of the vacuoles, by density gradient centrifugation, the specific activity of trehalase increased parallel to the specific content of vacuolar markers. This indicates that **trehalose** is located in the cytosol and trehalase in

the vacuole. It is suggested that **trehalose**, in addition to its role as a reserve may also function as a protective agent to maintain the cytosolic structure under conditions of stress.

Localization of trehalase in vacuoles and of **trehalose** in the cytosol of yeast (*Saccharomyces cerevisiae*).

Jun 1982,

Protoplasts of *Saccharomyces cerevisiae* synthesized and degraded **trehalose** when they were incubated in a medium containing traces of glucose and acetate. Such protoplasts were gently lysed by the polybase method and a **particulate** and soluble fraction was prepared. **Trehalose** was found in the soluble fraction and the trehalase activity mostly in the **particulate** fraction which also contained the vacuoles besides other cell organelles. Upon purification of the vacuoles ...

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Descriptors: Disaccharides--analysis--AN; \*Organoids--enzymology--EN; \**Saccharomyces cerevisiae*--analysis--AN; \*Trehalase--metabolism--ME; \***Trehalose**--analysis--AN; \*Vacuoles--enzymology--EN

Chemical Name: Disaccharides; **Trehalose**; Trehalase

5/3,K,AB/9 (Item 9 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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03193298 80010992 PMID: 225642

Separation of four components of the phosphoenolpyruvate: glucose phosphotransferase system in *Vibrio parahaemolyticus*.

Kubota Y; Iuchi S; Fujisawa A; Tanaka S

Microbiology and immunology (JAPAN) 1979, 23 (3) p131-46,

ISSN 0385-5600 Journal Code: 7703966

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Four classes of *Vibrio parahaemolyticus* mutants defective in the phosphoenolpyruvate: glucose phosphotransferase system (PTS) are described. They were phenotypically different, and were defective in different PTS components. The components designated tentatively as II, I, III, and H were separated by gel filtration of a wild-type extract. Component II, which was specific for glucose and found in the **particulate** fraction, is probably membrane-bound, glucose-specific enzyme II. Both components I and H were soluble proteins, and the latter was relatively heat-stable. Component I was required for phosphorylation of glucose, **trehalose**, fructose, mannose, and mannitol. Component H was also required for phosphorylating all the above sugars except fructose. These and some additional findings strongly suggest that components I and H correspond to enzyme I and HPr, respectively. Component III, a soluble heat-stable protein, may be equivalent to the sugar-specific factor III found in other organisms, although it seems to participate in phosphorylating two sugars, glucose and **trehalose**. There were evidences that mutants defective in components I and III were deficient in cyclic adenosine 3',5'-monophosphate synthesis under certain conditions.

1979,

... a wild-type extract. Component II, which was specific for glucose and found in the **particulate** fraction, is probably membrane-bound, glucose-specific enzyme II. Both components I and H were...

... and the latter was relatively heat-stable. Component I was required for phosphorylation of glucose, **trehalose**, fructose, mannose, and mannitol. Component H was also required for phosphorylating all the above sugars...

... found in other organisms, although it seems to participate in phosphorylating two sugars, glucose and **trehalose**. There were evidences that mutants defective in components I and III were deficient in cyclic...

5/3,K,AB/10 (Item 10 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)  
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02466557 77045534 PMID: 186109

A *Limulus* glucose-6-phosphatase with phosphotransferase activity characteristic of vertebrate liver microsomes. Its possible evolutionary significance.

Stetten M R; Goldsmith P K

Biochimica et biophysica acta (NETHERLANDS) Oct 22 1976, 444

(3) p835-52, ISSN 0006-3002 Journal Code: 0217513

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

1. *Limulus* hepatopancreas, coxal glands and intestine contain a **particulate** enzyme which can synthesize glucose 6-phosphate from glucose and inorganic pyrophosphate or carbamyl phosphate as well as hydrolyze glucose 6-phosphate. This has been clearly differentiated from hydrolysis by lysosomal or soluble phosphatases. 2. The enzyme resembles vertebrate glucose-6-phosphatase in its specific anatomical distribution, pH optimum, kinetic properties, donor specificity and phospholipid dependence, as indicated by its satency and lability to detergent treatment. 3. A variety of other invertebrates tested exhibited little or no PPI-glucose phosphotransferase activity with these properties. A similar phosphotransferase activity of lobster hepatopancreas had somewhat different kinetic properties and pH optimum. 4. The hypothesis that a specific glucose-6-phosphatase is to be found only in those animals which utilize free glucose as an important circulating form of energy is presented and discussed. It appears that a variety of transport compounds, such as **trehalose** and glucose, was tried at the evolutionary level of the Arthropods.

Oct 22 1976,

1. *Limulus* hepatopancreas, coxal glands and intestine contain a **particulate** enzyme which can synthesize glucose 6-phosphate from glucose and inorganic pyrophosphate or carbamyl phosphate...

... energy is presented and discussed. It appears that a variety of transport compounds, such as **trehalose** and glucose, was tried at the evolutionary level of the Arthropods.

5/3,K,AB/11 (Item 1 from file: 55)  
DIALOG(R) File 55:Biosis Previews(R)  
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09623993 BIOSIS NO.: 199598078911

Trehalase activity in thoracic musculature of the tasar silkworm, *Antheraea mylitta* Drury, during different developmental stages.

AUTHOR: Srivastava P P; Thangavelu K(a)

AUTHOR ADDRESS: (a)Cent. Tasar Res. Training Inst., P O Piska Nagari,



Ranchi 835 303\*\*India  
JOURNAL: Indian Journal of Experimental Biology 32 (12):p895-897  
1994  
ISSN: 0019-5189  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: Trehalase activity was measured in the thoracic musculature homogenates of larvae, pupae and moths of *A. mylitta* Drury (Lepidoptera: Saturniidae), tropical tasar silkworm. The tissue homogenates were separated into soluble and **particulate** fractions by differential centrifugation. Trehalase specific activity was maximum in larvae while minimum in the pupae. In the musculature of moth and larvae, the enzyme activity was more or less evenly distributed between soluble and **particulate** forms whereas in pupae 95% activity was observed in soluble fraction. The soluble fractions of larvae, pupae and moths hydrolyze a number of alpha-glycosides in addition to **trehalose** and therefore may be classified as a general alpha-glycosidase whereas the **particulate** fraction exhibits stringent specificity for **trehalose**. This study suggests that the form and activity of trehalase present during development is in accordance with the enzyme's physiological role in *A. mylitta* life cycle.

1994

1994

...ABSTRACT: *mylitta* Drury (Lepidoptera: Saturniidae), tropical tasar silkworm. The tissue homogenates were separated into soluble and **particulate** fractions by differential centrifugation. Trehalase specific activity was maximum in larvae while minimum in the...

...moth and larvae, the enzyme activity was more or less evenly distributed between soluble and **particulate** forms whereas in pupae 95% activity was observed in soluble fraction. The soluble fractions of larvae, pupae and moths hydrolyze a number of alpha-glycosides in addition to **trehalose** and therefore may be classified as a general alpha-glycosidase whereas the **particulate** fraction exhibits stringent specificity for **trehalose**. This study suggests that the form and activity of trehalase present during development is in...

5/3,K,AB/12 (Item 1 from file: 340)  
DIALOG(R) File 340:CLAIMS(R)/US Patent  
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Dialog Acc No: 3146577 IFI Acc No: 9915448  
Document Type: C

SPRAY DRIED VACCINE PREPARATION COMPRISING ALUMINIUM ADSORBED IMMUNOGENS;  
VACCINE COMPRISING IMMUNOGEN ADSORBED TO AN ALUMINUM SALT ADJUVANT, SAID  
VACCINE PREPARATION BEING A FREE FLOWING POWDER

Inventors: Cox John Cooper (AU); Jacobs Irwin Clay (US); Mason Norbert  
Simon (US); Sparks Robert Edward (US)

Assignee: CSL Ltd AU

Assignee Code: 40730

Publication (No,Date), Applic (No,Date):

US 5902565 19990511 US 95481403 19950710

Publication Kind: A

Calculated Expiration: 20160511

PCT Pub(No,Date), Applic(No,Date): WO 9415636

19940721 WO

93AU677 19931224

Section 371: 19950710

Section 102(e):19950710

Priority Applic(No,Date): US 95481403 19950710

Abstract: Vaccine preparations in stable **particulate** form are disclosed. An immediate-release preparation comprises an immunogen adsorbed to an aluminum adjuvant. A controlled- or delayed-release preparation comprises microspherical particles comprising a continuous matrix of biodegradable polymer containing discrete, immunogen-containing regions.

...PCT Pub(No,Date),Applic(No,Date): 19940721

Abstract: Vaccine preparations in stable **particulate** form are disclosed. An immediate-release preparation comprises an immunogen adsorbed to an aluminum adjuvant...

Exemplary Claim: 1. A vaccine preparation in stable, dry **particulate** form, comprising microspherical particles prepared by spray-drying, said particles comprising an immunogen adsorbed to...

...said vaccine preparation being a free flowing powder.

11. A vaccine preparation in stable, dry **particulate** form, comprising microspherical particles prepared by spray-drying said particles comprising a continuous matrix of...

...said vaccine preparation being a free flowing powder.

26. A vaccine preparation in stable, dry **particulate** form comprising microspherical particles prepared by spray drying an emulsion of an aqueous suspension comprising...

...continuous organic phase having biodegradable polymer dissolved therein or by spray drying a suspension of **particulate** immunogencontaining material in a continuous organic phase having biogradable polymer dissolved therein, said vaccine preparation...

Non-exemplary Claims: ...vaccine preparation of claim 4 wherein said stabiliser is selected from the group consisting of **trehalose**, lactose, dextrose and glucosamine...

...vaccine preparation of claim 11, which comprises the steps of forming a suspension of a **particulate** immunogen-containing material and optionally an adjuvant in a continuous organic phase having biodegradable polymer...

...19. The method of claim 18, wherein the **particulate** immunogen-containing material comprises an immunogen adsorbed to an aluminium salt adjuvant...

...vaccine composition of claim 20 further comprising at least one vaccine preparation in stable, dry **particulate** form, comprising microspherical particles prepared by spray-drying, said particles comprising an immunogen adsorbed to...

5/3,K,AB/13 (Item 2 from file: 340)  
DIALOG(R)File 340:CLAIMS(R)/US Patent  
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Dialog Acc No: 2365418 IFI Acc No: 9313299  
Document Type: C

TUMOR NECROSIS FACTOR FORMULATIONS; MIXED WITH STABILIZERS, BUFFERS AND SOLUTE; MANNITOL, DEXTRAN, CITRATE BUFFER, GLYCINE  
Inventors: Singh Maninder (US); Smith Flint (US)  
Assignee: Unassigned Or Assigned To Individual  
Assignee Code: 68000 Document Type: REASSIGNED  
Publication (No,Date), Applic (No,Date):

US 5215743      **19930601** US 88181077      19880413  
Publication Kind: A  
Calculated Expiration: 20100601  
(Cited in 003 later patents)  
Priority Applic(No,Date): US 88181077      19880413

Abstract: Compositions are described that are suitable for formulating cytokines, preferably tumor necrosis factor, that maintain their biological activities over a wide range of temperatures by, among other aspects, decreasing them sensitivity to agitation, and preventing oligomer and **particulate** matter formation.

Publication (No,Date), Applic (No,Date):  
...**19930601**

Abstract: ...of temperatures by, among other aspects, decreasing them sensitivity to agitation, and preventing oligomer and **particulate** matter formation.

Exemplary Claim: ...group consisting of human serum albumin, dextran, polyethylene glycol, polysorbate 80, polyvinylpyrrolidone, sucrose, lactose, or **trehalose**, 3) a physiologically acceptable buffer, said buffer being selected from the group consisting of citrate...  
Non-exemplary Claims: ...from the group consisting of human serum albumin, dextran, polyvinylpyrrolidone, polysorbate 80, lactose, sucrose, or **trehalose**, and 3) a physiologically acceptable noncrystallizable buffer said buffer being selected from the group consisting...

5/3,K,AB/14      (Item 3 from file: 340)  
DIALOG(R) File 340:CLAIMS(R)/US Patent  
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Dialog Acc No: 1461917    IFI Acc No: 8308960  
Document Type: C  
PROCESS FOR SEPARATING HYDROCARBONS FROM **PARTICULATE** SOLIDS;  
SLURRYING WITH AQUEOUS SOLUTION OR DISPERSION OF MICROBIALY PRODUCED GLYCOLIPIDS  
Inventors: JAHN-HELD WILHELM (DE); LINDORFER WALTER (DE); SCHULZ WALTHER (DE); WAGNER FRITZ (DE)  
Assignee: GESELLSCHAFT FUR BIOTECHNOLOGISCHE FORSCHUNG MBH (GBF) DE;  
WINTERSHALL A G DE  
Assignee Code: 01399 92800  
Publication (No,Date), Applic (No,Date):  
Publication (Kind,No,Date), Applic (No,Date):  
US 4392892      **19830712** US 81307092      19810918  
Publication Kind: A  
Calculated Expiration: 20000712  
(Cited in 007 later patents) Document Type: EXPIRED  
Continuation Pub(No),Applic(No,Date): ABANDONED      US 7982631  
19791005  
Priority Applic(No,Date): DE 2843685      19781006

Abstract: Oils or petroleum hydrocarbons are separated from solid or solid/liquid mixtures thereof with soil, sand or oil processing residues, by treating these oil-containing mixtures with an aqueous solution or dispersion of a crude extract of microbially produced glycolipids and separating the oil-containing phase from the aqueous phase.

PROCESS FOR SEPARATING HYDROCARBONS FROM **PARTICULATE** SOLIDS...  
Publication (No,Date), Applic (No,Date):  
...**19830712**  
Non-exemplary Claims: ...process according to claim 1, wherein said

glycolipids are mono- and diesters of Alpha , Alpha '-trehalose  
and long-chained Alpha -alkyl- Beta -hydroxy fatty acids...

5/3,K,AB/15 (Item 4 from file: 340)  
DIALOG(R) File 340:CLAIMS(R)/US Patent  
(c) 2002 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1437272 IFI Acc No: 8301266  
Document Type: C  
PREPARATION OF DRIED BAKER'S YEAST; CULTIVATING, COMPRESSION, AND ADDING AN  
EMULSIFIER  
Inventors: CLEMENT PHILIPPE (FR); ROSSI JEAN-PAUL (FR)  
Assignee: INDUSTRIELLE LESAFFRE STE FR  
Assignee Code: 08015  
Publication (No,Date), Applic (No,Date):  
Publication (Kind,No,Date), Applic (No,Date):  
US 4370420 19830125 US 78917726 19780621  
Publication Kind: A  
Calculated Expiration: 20000125  
(Cited in 003 later patents)  
Cont.-in-part Pub(No),Applic(No,Date): ABANDONED US  
76702019 19760702  
Priority Applic(No,Date): FR 7520943 19750703

Abstract: Active dried baker's yeast is prepared by selecting a yeast strain stable to drying, cultivating the yeast strain in several aerobic fermentation stages and selecting conditions for the last stage that produce a compressed yeast having preferred gas release characteristics, harvesting and carefully washing the yeast from the last stage to obtain compressed yeast having the preferred gas release characteristics, adding to the compressed yeast an emulsion of an emulsifying agent, dividing the resultant mixture into fine particles, and drying the particles by flash pneumatic conveyor drying and/or fluidized bed drying to obtain active dry yeast having greater than 92% dry matter content. The dry yeast have an activity almost equal to fresh yeast on nonsweetened dough or on sweetened dough.

Publication (No,Date), Applic (No,Date):  
...19830125

Exemplary Claim: ...DEFINITE DETERIORATION IN THE STABILITY OF THE YEAST,  
AND (C) THE FOLLOWING CHARACTERISTICS (A) A **TREHALOSE** CONTENT IN  
THE DRY MATTER OF AT LEAST 12% (B) A RATIO OF NITROGEN TO...  
...FINE PARTICLES THE THUS-OBTAINED COMPRESSED YEAST EMULSIFYING AGENT  
COMPOSITION AND DRYING THE SAME IN **PARTICULATED** CONDITION UNDER  
GENTLE DRYING CONDITIONS, EITHER BY FLASH PNEUMATIC CONVEYOR DRYING, OR  
FLUIDIZED BED DRYING...

5/3,K,AB/16 (Item 5 from file: 340)  
DIALOG(R) File 340:CLAIMS(R)/US Patent  
(c) 2002 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1391381 IFI Acc No: 8206675  
Document Type: C  
ACTIVE DRIED BAKERS' YEAST; ADDING STABILIZING EMULSIFIER BEFORE DRYING  
Inventors: CLEMENT PHILIPPE (FR); ROSSI JEAN-PAUL (FR)  
Assignee: INDUSTRIELLE LESAFFRE STE FR  
Assignee Code: 08015  
Publication (No,Date), Applic (No,Date):  
Publication (Kind,No,Date), Applic (No,Date):

US 4328250      **19820504** US 78930163      19780802

Publication Kind: A

Calculated Expiration: 19990504

(Cited in 002 later patents)

Continuation Pub(No),Applic(No,Date): ABANDONED  
19760702

US 76702019

Priority Applic(No,Date): FR 7520943      19750703

Abstract: A dry yeast composition in **particulate** form containing at least 92% dry matter is prepared consisting essentially of active dry bakers' yeast capable of fermenting sweetened doughs containing more than 5% sugar and an emulsifying agent having an HLB value of between 3 and 11. The emulsifying agent is added to the yeast before drying and protects the yeast during drying.

Publication (No,Date), Applic (No,Date):

...**19820504**

Abstract: A dry yeast composition in **particulate** form containing at least 92% dry matter is prepared consisting essentially of active dry bakers...

Exemplary Claim: 1. A YEAST COMPOSITION IN SOLID **PARTICULATE** FORM, CONSISTING ESSENTIALLY OF AN ACTIVE DRY BAKER'S YEAST AND AN EMULSIFYING AGENT HAVING...

Non-exemplary Claims: ...8. A process for preparing a yeast composition in solid **particulate** form, consisting essentially of an active dry baker's yeast and an emulsifying agent having...deterioration in the stability of said yeast, and (C) satisfies the following characteristics: (a) a **trehalose** content in the dry matter of at least 12%; p3 (b) a ratio of nitrogen...

...fine particles the thus-obtained compressed yeast emulsifying agent composition and drying the same in **particulated** condition under gentle drying conditions at least sufficient to reduce the water content thereof to...17. A process for preparing a composition in solid **particulate** form, consisting essentially of an active dry baker's yeast and an emulsifying agent having...

...deterioration in the stability of said yeast, and (C) satisfies the following characteristics: (a) a **trehalose** content in the dry matter of at least 12%; (b) a ratio of nitrogen to...

...fine particles the thus-obtained compressed yeast emulsifying agent composition and drying the same in **particulated** condition under gentle drying conditions at least sufficient to reduce the water content thereof to...19. A process for preparing a yeast composition in solid **particulate** form, consisting essentially of an active dry baker's yeast and an emulsifying agent having...

...definite deterioration in the stability of said yeast, and (C) the following characteristics: (a) a **trehalose** content in the dry matter of at least 12%; (b) a ratio of nitrogen to...

...fine particles the thus-obtained compressed yeast emulsifying agent composition and drying the same in **particulated** condition under gentle drying conditions at least sufficient to reduce the water content thereof to...

?

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